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Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
James W. Blease, et al

INK JET INK SET

Serial No. 10/695,165

Filed 28 October 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Group Art Unit: 1755

Examiner: Helene G. Klemanski

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Frieda Grinnell
Frieda Grinnell

October 14, 2005
Date

Sir:

DECLARATION UNDER 37 CFR 1.132

I, James W. Blease declare as follows:

1. I hold a BS in chemical engineering from the University of Nebraska-Lincoln and an MS in chemical engineering from the same university. I have been working for Eastman Kodak Co. for the last twenty-four years in product manufacturing, research and development. I have been working for the past six and a half years on ink jet ink materials and formulation development. I am an inventor on ten U.S. patents relating to ink jet ink and two additional U.S. patents in non-ink jet fields. A number of the issued ink jet patents pertain to the selection of dyes and dye mixtures for inks of an ink set.
2. I am a co-inventor on Patent Application Serial No. 10/695,165 and have read and understand the Office Action dated June 15, 2005 and the references cited therein.
3. In the patent application we have supplied the required CIELAB a* values and the Status A density of the two black dyes. Methods of determining these values are well known in the art and a specific example of how to perform the measurement is described at page 16, line 19 of the specification. We have stated that the black dyes are metal complex dyes. We have provided examples of two

classes of the first black dye, either Reactive Black or Pacified Reactive Black 31, which are disazo copper complex dyes; or C.I. Acid Black 52 which is a monoazo chromium complex dye (an example of the dye discussed at page 7, line 2).

These dyes are structurally quite different. For the second black dye we have also provided examples of two different classes of dyes, a metal complex of a bisazo black dye and a metal complex of a trisazo black dye. We have four working ink examples using 6 different dyes in combination along with 16 comparative examples.

4. We have stated that the yellow dye is an azoaniline yellow dye or a metal complex yellow dye and have provided several examples thereof. These are classes of water fast yellow dyes.

5. The CIELAB value and density status parameters provide the information required to choose black dyes which meet the object of having a neutral tone over a range of densities when printed on a receiving element; while a metal complex dye will meet the light fastness requirement. With regard to the yellow dye, the dyes required by the invention are classes having comparable light fastness to the black dyes. The dyes must have similar light fastness so that the color balance will not change over time. Any yellow dye will provide the appropriate color correction to the black ink, but only certain classes of dyes provide the appropriate light fastness. The dye mixtures of the invention meet the specification for neutral densities and lightfastness across receiving elements of very different composition i.e. a glossy paper based reflective receiving element and a transparent, polymeric film based receiving element as shown in figures 1 and 2 and table 4.

6. It is my opinion that any two black dyes that meet the requirements of the claims in combination with any yellow dye that meets the requirements of the claims will work in the invention. It is further my opinion, that one skilled in the art, given the information in the application, will be able to prepare the ink of the invention without undue experimentation..

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: October 14, 2005 James W. Blease
James W. Blease